

A NEW SPECIES OF POLYCHAETOUS ANNELID FROM PANAMA, WITH NOTES ON AN HAWAIIAN FORM.

By AARON L. TREADWELL,
Of Vassar College, Poughkeepsie, New York.

Among the material received from time to time from the United States National Museum for identification, there was a new species of *Phyllodoce*, collected at Chame Point, Panama, by Mr. Robert Tweedlic in 1912, which is herewith described. A reexamination of material from the Hawaiian Islands, referred to *Eunice siciliensis* Grube in a former paper, makes it necessary to change the name which I then applied. This is done in the present paper, and additional data, resulting from a more detailed study, are presented.

LEODICE DUBIA Woodward.

Eunice dubia WOODWARD, Bull. Mus. Comp. Zool., vol. 51, No. 1, 1907, p. 11, pl. 2, fig. 15; pl. 1, figs. 4, 5, 6.

Eunice siciliensis TREADWELL, Bull. U. S. Fish Comm., 1903, p. 1165, 1906.

In the above paper I described as *Eunice siciliensis* a small Leodiceid from the Hawaiian Islands. The identification was based mainly on the structure of the jaws, the mandibles having the large calcareous terminal portions characteristic of this species. Doubts as to the accuracy of the determination led to a reexamination of the specimen, now in the United States National Museum, and a comparison of the posterior end with Woodward's description of *Eunice (Leodice) dubia*, the small palolo of the "motosuga" day, or day before the swarming of the true Palolo, established its identity with this. Woodward saw only the swarming posterior ends but these were described with sufficient accuracy to identify them with the specimen from the Hawaiian Islands.

No gills were visible on this single specimen, and this would apparently transfer it to the genus *Nicidion*. On all of the members of this group of the Leodidae, however, as for instance, in *Leodice cariboea* of the West Indies, the gill development is very limited and the jaw structure is so characteristic of the *Leodice* that I have placed it in this genus.

The body was approximately 300 mm. long, with a head width of about 2 mm. Anteriorly the somites are broadly rounded dorsally, and flattened ventrally, with the parapodia at the ventro lateral angles. After about the first quarter of the body where, apparently, the sex products begin to appear, the ventral surface is rounded and the body assumes very nearly a circular cross section with the parapodia on the lateral edge.

The head is rather deeply incised by a V-shaped depression, each lateral half ending in a rounded point. The antennae had all been lost, and the peristomium was mutilated so as to show no indication of the character of the nuchal cirri. The eyes were oval in outline, situated in the usual position. Two pairs of anal cirri, one much larger than the other, are carried on the pygidium.

Parapodia from the anterior region of the body (fig. 3), show a rounded setal lobe with practically equal anterior and posterior lips, and two heavy brown aciculae. The dorsal cirrus is long, slender, finger-shaped, the ventral one orbicular, flattened. Two tufts of setae arise very close together, the dorsal ones simple, curved, without perceptible wings, but with the edges finely striated (fig. 4). Ventral setae compound, basal portion serrate along its apex, terminal joint with finely serrated sheath and subterminal tooth longer than terminal one (fig. 5). No pectinate setae appeared in any of the parapodia examined.

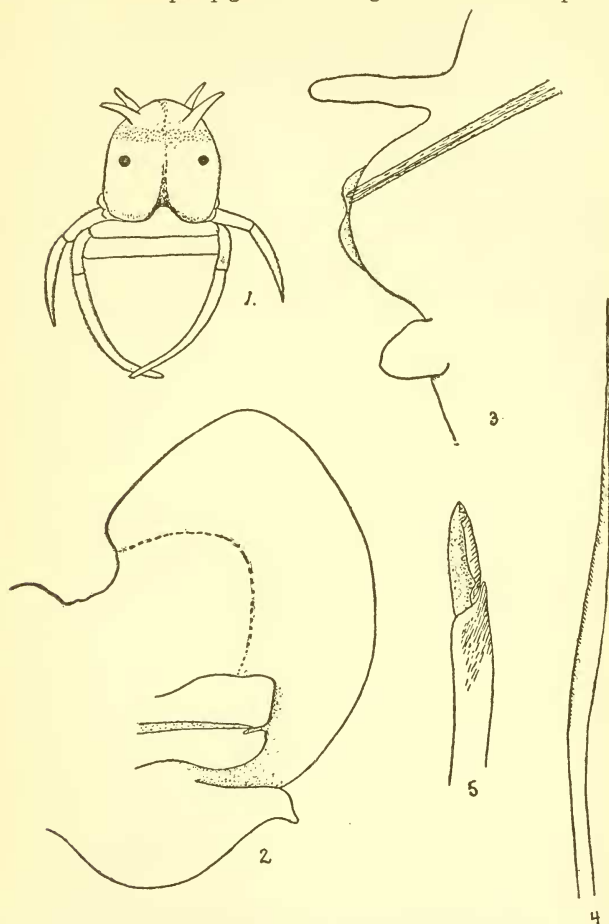
The posterior parapodia were as figured by Woodward. The setae lobes are slender and elongated, and the setae are essentially like those farther forward except that the basal portion of the compound setae is much elongated.

PHYLLODOCE PANAMENSIS, new species.

Description.—Head unusually broad as compared with length (fig. 1), the width behind antennae being nearly equal to that of posterior margin. Eyes situated about midway of the head, small, with very small lenses. A noticeable groove at middle of posterior margin, into which a lobe from the anterior margin of the first somite extends. Antennae about one-third as long as head, bluntly pointed at apex. There is a pigmented band around the head just posterior to the antennae, and a very narrow band of pigment along the posterior margin.

Tentacular cirri with rather long basal joints, the terminal joint of the first about equal in length to that of the ventral one on somite two. Dorsal cirrus of somite two equal to that of somite three, extending to somite nine. All cirri showed traces of pigment patches. Dorsal cirrus of somite four, leaf-like, but very small; those of succeeding somites increase rapidly in size to the eighth, while from here backward the increase is very gradual. All of the later cirri overlap one another, the exposed portion showing a broad pigmented band,

but leaving the margin uncolored. A broad band of this same pigment extends across the dorsal surface of each somite with a very delicate line of deeper pigment marking its anterior and posterior



FIGS. 1-5.—1, *PHYLLODOCE PANAMENSIS*, HEAD $\times 20$. 2, PARAPODIUM $\times 33$. *LEODICE DUBIA*, 3, ANTERIOR PARAPODIUM $\times 90$. 4, SIMPLE SETA $\times 370$. 5, COMPOUND SETA $\times 560$.

edges in the dorsal median line. Ventral cirri are much smaller with narrowed terminal portion and throughout middle and posterior portions of the body with very prominent pigment patches. The specimen was incomplete, retaining only about one hundred and twenty somites.

A well-developed parapodium has a bilobed end, the dorsal being the larger of the two lobes. Into the notch between the two extends the apex of a stout aciculum. Behind the lobes is a row of forty or more setae. The dorsal cirrus is ovate attached by a broad cirrophore (fig. 2). In this drawing it is represented as it appeared when flattened under the pressure of the cover glass. Ventral cirrus with rounded ventral margin and pointed apex.

Setae all compound; the basal portion expanded at the end, and carrying at this place a dense tuft of stout spines. Terminal portion slender, curved, with a row of teeth along one margin.

Width at head, 1.25 mm.; length of head, 1.25 mm.; total width, including parapodia, at somite five, 4 mm.; total width farther back, 6 mm.

Type.—Cat. No. 16831, U.S.N.M., was collected at Chame Point, Panama, by Robert Tweedlie, in 1912.